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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,535	10/24/2003	Paul L. Zengerle	86428AJA	9881

7590

03/25/2005

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EXAMINER

WALKE, AMANDA C

ART UNIT	PAPER NUMBER
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1752

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/692,535

Applicant(s)

ZENGERLE ET AL.

Examiner

Amanda C Walke

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Connelly et al (5,998,120) or Saito et al (6,220,925).

Connelly et al disclose a process for making a direct dispersion of a photographically useful material is discloses comprising: mixing (i) an aqueous phase comprising a gelatin solution and (ii) a liquid organic phase comprising a photographically useful material under conditions of high shear or turbulence to form a fine dispersion of the organic phase having an average particle size of less than 0.5 micron dispersed in the aqueous phase; wherein the gelatin solution comprises a mixture of a first gelatin having an isoelectric point pH of less than or equal to 5.2 and a second gelatin having an isoelectric point pH of greater than or equal to 6.0. In accordance with the invention, the use of blends of a first gelatin having an pI of less than or equal to 5.2, such as a conventional lime processed gelatin, and a second gelatin having an pI of greater than or equal to 6.0, such as an acid processed gelatin, in a direct photographic dispersion yields a substantial reduction in viscosity in comparison to the use of the first gelatin alone, which reduction is greater than would be expected by just using blends of the first gelatin with another relatively low pI gelatin having an equivalent inherent viscosity as the second gelatin. In accordance with preferred embodiments of the invention, relatively low levels of APO gelatin

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may be used partially replacing LPO gelatin in a dispersion formulation to obtain significant viscosity reduction while minimizing adverse effects which may be associated with the use of higher levels of acid processed gelatin. The process of the invention is generally applicable to forming aqueous dispersions of hydrophobic photographically useful materials (PUMs) which may be used at various locations throughout a photographic element. Dispersions formed in accordance with the invention may be used in single color (including black and white) or multicolor photographic elements. Multicolor elements typically contain image dye-forming units sensitive to each of the three primary regions of the spectrum. Each unit can comprise a single emulsion layer or multiple emulsion layers sensitive to a given region of the spectrum. The layers of the element, including the layers of the image-forming units, can be arranged in various orders as known in the art. In an alternative format, the emulsions sensitive to each of the three primary regions of the spectrum can be disposed as a single segmented layer.

Photographically useful materials which may be dispersed in accordance with the invention include photographic couplers (including yellow, magenta and cyan image-forming couplers, colored or masking couplers, inhibitor-releasing couplers, and bleach accelerator-releasing couplers, dye-releasing couplers, etc.), UV absorbers, preformed dyes (including filter dyes), high-boiling organic solvents, reducing agents (including oxidized developer scavengers and nucleators), stabilizers (including image stabilizers, stain-control agents, and developer scavengers), developing agents, development boosters, development inhibitors and development moderators, optical brighteners, lubricants, etc. After formation of a dispersion in accordance with the invention, the resulting dispersion may be incorporated in a photographic coating layer in accordance with known practices. In practicing the present invention, a hydrophobic PUM is

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melted by heat or dissolved in an organic solvent prior to homogenization. Materials that have a relatively low melting point, e.g. below 90 degrees C., can be dispersed without the use of organic solvents. The molten mixture of the PUM with or without the permanent solvent is termed the liquid organic (or oil) phase. Where the liquid organic phase includes an organic solvent, it is preferred to use high-boiling or permanent organic solvents. High boiling solvents have a boiling point sufficiently high, generally above 150 degreesC. at atmospheric pressure, such that they are not evaporated under normal dispersion making and photographic layer coating procedures. Non-limiting examples of high boiling organic solvents that may be used include the following:

-
- S-1 Dibutyl phthalate
 - S-2 Tritolyl phosphate
 - S-3 N,N-Diethyldodecanamide
 - S-4 Tris(2-ethylhexyl)phosphate
 - S-5 Octyl oleate monoepoxide
 - S-6 2,5-Di-t-pentylphenol
 - S-7 Acetyl tributyl citrate
 - S-8 1,4-Cyclohexylenedimethylene bis(2-ethylhexanoate)
 - S-9 Bis(2-ethylhexyl)phthalate
 - S-10 2-phenylethyl benzoate
 - S-11 Dibutyl sebacate
 - S-12 N,N-Dibutyldodecanamide
 - S-13 Oleyl alcohol
 - S-14 2-(2-Butoxyethoxy)ethyl acetate
-

It is an advantage of the process of the invention that auxiliary solvents are not essential for forming fine dispersions, and it is preferred that direct dispersions are prepared wherein essentially no volatile or water-miscible organic solvent is present in the organic phase. In accordance with particularly preferred embodiments, such direct dispersions may be prepared

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where the organic phase comprises at least 16 weight percent, more preferably at least 17 weight percent, and most preferably at least 18 weight percent, of the dispersion even in the absence of auxiliary solvents. Inclusion of such solvents in photographic elements, however, may be desirable in certain situations to achieve photographic properties not directly related to the dispersion making process, and their presence will not interfere with the process of the invention. Most useful auxiliary solvents are water immiscible, volatile solvents, and solvents with limited water solubility which are not completely water miscible.

Given the teachings of the reference, the instant claims are anticipated.

Saito et al disclose a silver halide color photographic light-sensitive material excellent in color reproducibility. More particularly, the present invention relates to a silver halide color photographic light-sensitive material containing both a pyrrolotriazole coupler and a non-color forming colorless cyclic imide having a diffusion-resistant group. Specific examples of the high boiling point organic solvent having a boiling point of not less than 175.degree. C. at a normal pressure include phthalic acid esters (for example dibutyl phthalate, dicyclohexyl phthalate, di-2-ethylhexyl phthalate, didecyl phthalate, bis(2,4-di-tert-amylphenyl) phthalate, bis(2,4-di-tert-amylphenyl) isophthalate, or bis(1,1-diethylpropyl) phthalate, phosphoric acid or phosphonic acid esters (for example, triphenyl phosphate, tricresyl phosphate, 2-ethylhexyl diphenyl phosphate, tricyclohexyl phosphate, tri-2-ethylhexyl phosphate, tridodecyl phosphate, tributoxyethyl phosphate, tri-chloropropyl phosphate, or di-2-ethylhexyl phenyl phosphonate), benzoic acid esters (for example, 2-ethylhexyl benzoate, dodecyl benzoate, or 2-ethylhexyl-p-hydroxy-benzoate), amides (for example, N,N-diethyldodecanamide, N,N-diethylaurylamide, or N-tetradecylpyrrolidone), sulfonamides (for example, N-butylbenzenesulfonamide), alcohols or

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phenols (for example, isostearyl alcohol, or 2,4-di-tert-amylphenol), aliphatic carboxylic acid esters (for example, bis(2-ethylhexyl) sebacate, dioctyl azelate, glycerol tributyrates, isostearyl lactate, or trioctyl citrate), aniline derivatives (for example, N,N-dibutyl-2-butoxy-5-tert-octylaniline), hydrocarbons (for example, paraffin, dodecylbenzene, or diisopropylnaphthalene) and chlorinated paraffins. Phosphoric acid esters and amides are particularly preferably employed as the high boiling point organic solvent used together with the coupler represented by the formula (1) according to the present invention. At least one compound selected from the phosphoric acid esters and amides is preferably employed alone or together with other high boiling point organic solvent. More preferably, at least one of the phosphoric acid ester is used together with at least one of the amides, or at least one of the phosphoric acid esters and at least one of the amide are used together with other high boiling point organic solvent (see especially column 31).

Given the teachings of the reference, the instant claims are anticipated.

Conclusion

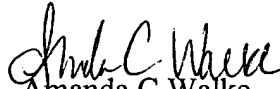
3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Merkel et al (6,107,017), Zengerle et al (5,468,604), Takahashi et al (6,103,460), Stanley et al (6,200,741), Honan et al (6,824,941), Olijve et al (6,645,712), Endo (6,074,808), Texter et al (5,624,467), and Lobo et al (5,589,322) are cited for their teachings of similar materials.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amanda C Walke whose telephone number is 571-272-1337. The examiner can normally be reached on M-R 5:30-4.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Amanda C Walke
Examiner
Art Unit 1752

ACW
March 18, 2005